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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/288,038	04/08/1999	MITSUO NIIDA	35.C13444US	6992

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EXAMINER

ABELSON, RONALD B

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/288,038

Applicant(s)

NIIDA ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 5, 6, 12, 14, and 19-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Malik (US 5,938,735).

Regarding claims 1, 12, 14, 20, 25, and 26, Malik teaches a method and apparatus for a data communication system (fig. 4). The system comprises a source (fig. 4 box 100) node for transferring data using asynchronous communication (col. 7 lines

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11 - 45), one or more destination nodes for receiving data (fig. 4 box 160), a controller (fig. 4 box 24) for setting a logical connection relationship (ISDN B and D channels, abstract) between source node and destination node(s), wherein controller selects a communication protocol to be used among a plurality of different communication protocols (col. 8 lines 22 - 47).

Regarding claim 5, communication protocol includes a means for identifying a communication partner / address (fig. 3 box 505).

Regarding claim 6, communication protocol supports unicast communication (see link for fig. 4 box 101 161)

Regarding claim 19, object data is at least one of still image data, graphic data, text data, file data, and program data (col. 6 lines 31 - 53).

Regarding claims 21 - 24, in addition to the limitations listed in claim 1, it is well known in the art that the B-ISDN and D-ISDN support data being transmitted in packets.

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 8 - 11 and 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malik.

Regarding claim 8, the source node and destination node include a register space in which communication ability of the node is written (fig. 4 box 102, 104). Although Malik does not explicitly state the communication ability is stored in a register, it is obvious that both coordination managers fig. 4 box 102, 104) must be able to obtain this information.

Regarding claims 9 and 11, controller selects communication protocol on the basis of the content of the register spaces and controller selects a communication protocol whenever the logical connection relationship is set (fig. 4 box 24, col. 8 lines 23 - 47). Although Malik does not explicitly teach registers, it is obvious that the controller (fig. 4 box 106) must be able to obtain information to determine which protocol to use.

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Regarding claim 10, the source node and destination node include register space in which information regarding the logical connection relationship is written (ISDN B and D channels, fig. 4 box 102, 104, abstract). Although Malik does not explicitly state the communication ability is stored in a register, it is obvious that both coordination managers fig. 4 box 102, 104) must be able to obtain this information.

Regarding claim 13, the destination node returns a response to transferred data (responding to a prompt, col. 7 lines 11 - 45). Although Malik does not explicitly state the destination node responds by using asynchronous communication, the system supports this form of communication.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malik as applied to claim 1 above, and further in view of Fuentes (US 5,440,613).

Malik is silent on broadcast communication.

Fuentes teaches AT&T's ISDN PRI implementation for X.25 supports broadcast capability.

Therefore it would have been obvious to one of ordinary skill in the art, having both Malik and Fuentes before him/her

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and with the teachings [a] as shown by Malik, a data communication system supporting asynchronous communication, containing a controller for setting a logical connection relationship between source node and destination node(s), wherein the controller selects a communication protocol to be used among a plurality of different communication protocols, and [b] as shown by Fuentes, AT&T's ISDN PRI implementation for X.25 supports broadcast capability, to be motivated to modify the system of Malik by configuring the source and destination terminals to support AT&T's ISDN PRI implementation for X.25. This could be performed by a software upgrade. This would improve the system to allow a single source terminal to contact all the destination terminals instantaneously, such as in an emergency situation.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Malik and Fuentes as applied to claim 2 above, and further in view of Chaddha (US 6,233,017).

The combination of Malik and Fuentes is silent on multicast communication.

Chaddha teaches ISDN supports multicast communication.

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Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Malik and Fuentes and Chaddha before him/her and with the teachings [a] as shown by the combination of Malik and Fuentes, a data communication system supporting asynchronous communication, containing a controller for setting a logical connection relationship between source node and destination node(s), wherein the controller selects a communication protocol to be used among a plurality of different communication protocols, and [b] as shown by Chaddha, ISDN supports multicast capability, to be motivated to modify the system of the combination of Malik and Fuentes by configuring the source and destination terminals to support a protocol that includes multicast capability. This could be performed by a software upgrade. This would improve the system if the source wanted to send information to a subset of all destination terminals simultaneously.

7. Claims 16 - 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (US 6,006,286), and further in view of Malik.

Baker teaches a data communication system (fig. 1) comprising: a source node (fig. 1 box 54) for transferring object data including one or more segments by using at least one

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asynchronous communication (col. 1 lines 46 - 60), one or more destination nodes (fig. 1 box 50) and the communication system is a bus-type network supporting the IEEE 1394 - 1995 Standard (fig. 1 see 1394 Serial Bus, col. 1 lines 46 - 60).

Baker fails to teach a controller for setting a logical connection relationship between source node and destination node(s), wherein controller selects a communication protocol to be used among a plurality of different communication protocols.

Malik teaches a controller (fig. 4 box 24) for setting a logical connection relationship (ISDN B and D channels, abstract) between source node and destination node(s), wherein controller selects a communication protocol to be used among a plurality of different communication protocols (col. 8 lines 22 - 47).

Therefore it would have been obvious to one of ordinary skill in the art, having both Baker and Malik before him/her and with the teachings [a] as shown by Baker, a data communication system comprising: a source node for transferring object data including one or more segments by using at least one asynchronous communication, one or more destination nodes and the communication system is a bus-type network supporting the IEEE 1394 - 1995 Standard, and [b] as shown by Malik, a controller for selecting a communication protocol to be used

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among a plurality of different communication protocols, to be motivated to modify the system of Baker by replacing the personal computer (fig. 1 box 12) with the processor and accompanying logic (fig. 4 box 24) of Malik. This would improve the system of Baker since the system would be able to select an optimal protocol for transferring the data as opposed to being confined to one protocol.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Baker and Malik and further in view of Duckwall (US 5,802,057).

The combination of Baker and Malik fails to teach a communication protocol using an asynchronous broadcast.

Duckwall teaches asynchronous broadcast is supported by the P1394 Serial Bus Standard (col. 1 lines 45 - 67).

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Baker and Malik and Duckwall before him/her and with the teachings [a] as shown by the combination of Baker and Malik, a data communication system comprising: a source node for transferring object data including one or more segments by using at least one asynchronous communication, one or more destination nodes, the communication system is a bus-type network supporting the IEEE

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1394 - 1995 Standard, and a controller for selecting a communication protocol to be used among a plurality of different communication protocols , and [b] as shown by Duckwall, a communication protocol using an asynchronous broadcast, to be motivated to modify the system of the combination of Baker and Malik by configuring the source and destination terminals to accept protocols supporting asynchronous broadcast. This could be done in software. This would improve the system since acknowledge packets are not required (col. 1 lines 45 - 67). In a broadcast situation, the network could become congested if destination nodes were required to send acknowledgements.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Baker and Malik and further in view of Suzuki (US 6,334,161).

The combination of Baker and Malik fails to teach a communication protocol using an asynchronous write transaction.

Suzuki teaches a communication protocol using an asynchronous write transaction (col. 25 lines 38 - 43).

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Baker and Malik

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and Suzuki before him/her and with the teachings [a] as shown by the combination of Baker and Malik, a data communication system comprising: a source node for transferring object data including one or more segments by using at least one asynchronous communication, one or more destination nodes, the communication system is a bus-type network supporting the IEEE 1394 - 1995 Standard, and a controller for selecting a communication protocol to be used among a plurality of different communication protocols , and [b] as shown by Suzuki, a communication protocol using an asynchronous write transaction ,to be motivated to modify the system of the combination of Baker and Malik by configuring the source and destination terminals to accept protocols supporting asynchronous write. This could be done in software. This would improve the system since by allowing an image providing device to be directly connected to the printer (Suzuki: col. 1 lines 44 - 52).

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Baker and Malik, and further in view of applicant's admitted prior art.

The combination of Baker and Malik is silent on the use of addresses for transmitting data from source to destination.

The applicant's admitted prior art teaches that the source node writes the object data by using an address for commonly designating memory spaces of one or more destination nodes (fig. 3, spec: pg. 21 lines 4 - 25). As admitted by the applicant, this is required by the IEEE 1212 CSR Standard.

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of Baker and Malik and Suzuki before him/her and with the teachings [a] as shown by the combination of Baker and Malik, a data communication system comprising: a source node for transferring object data including one or more segments by using at least one asynchronous communication, one or more destination nodes, the communication system is a bus-type network supporting the IEEE 1394 - 1995 Standard, and a controller for selecting a communication protocol to be used among a plurality of different communication protocols , and [b] as shown by the applicant's admitted prior art, the source node writes the object data by using an address for commonly designating memory spaces of one or more destination nodes, to be motivated to modify the system of the combination of Baker and Malik by choosing peripheral devices (Baker: fig. 1 box 48, 50, 52, 52, and 56) that comply with the IEEE 1212 CSR Standard. This would improve the system since the

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peripheral devices would be able to be easily integrated with one another since they all adhere to a common standard.

Conclusion

9. The prior art is of record but not relied upon in the office action.

Gilbert (US 6,058,433) teaches a logical connection on the ISDN B channel (col. 5 line 57 - col. 6 line 4).

Bales (US 6,009,157) teaches a logical connection on the ISDN D channel (abstract).

Yamaguchi (US 6,275,472) teaches packets for B-ISDN (col. 1 lines 8 - 17).

Greene (US 6,246,759) teaches packets for D-ISDN (col. 4 lines 29 - 36).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be

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reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

RA
Ronald Abelson
Examiner
Art Unit 2663

RA

May 31, 2002

MELVIN MARCELO
PRIMARY EXAMINER